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(54) **METHOD AND APPARATUS FOR INTERNETWORKED WIRELESS INTEGRATED NETWORK SENSOR (WINS) NODES**

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(58) **Field of Search** 709/224

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(57) **ABSTRACT**

The Wireless Integrated Network Sensor Next Generation (WINS NG) nodes provide distributed network and Internet access to sensors, controls, and processors that are deeply embedded in equipment, facilities, and the environment. The WINS NG network is a new monitoring and control capability for applications in transportation, manufacturing, health care, environmental monitoring, and safety and security. The WINS NG nodes combine microsensor technology, low power distributed signal processing, low power computation, and low power, low cost wireless and/or wired networking capability in a compact system. The WINS NG networks provide sensing, local control, remote reconfigurability, and embedded intelligent systems in structures, materials, and environments.

55 Claims, 50 Drawing Sheets